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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 10

Application Number: 09/507,004
Filing Date: February 22, 2000
Appellant(s): MANGANARIS ET AL.

Mark D. Simpson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08 December 2003.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences that will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Claims 1-15 stand or fall together.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of the claims under appeal:

6,377,934	Chen et al.	4-2002
6,317,722	Jacobi et al.	11-2001

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Patent 6,377,934) in view of Jacobi et al. (U.S. Patent 6,317,722).

As per claim 1, Chen et al. disclose a computer-implemented method of processing market research data including aggregate sales data concerning items grouped in a plurality of market baskets and sold during retail sales transactions of a retailer, said method comprising the steps of (see column 3, lines 47-50): receiving analysis parameters from said retailer for use in analyzing said market research data (see column 2, lines 14-25, analysis parameters are received for analyzing the enterprise data); receiving said aggregate sales data (see column 2, lines 40-45, aggregate data is received); and analyzing said aggregate sales data based on said market basket groupings and determining if any of said market basket groupings display characteristics

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identified by said analysis parameters (see column 2, lines 51-63, and column 5, lines 51-61, the data is analyzed based upon characteristics).

Chen et al. does not explicitly disclose that for all market basket groupings which have been determined to display said characteristics, enhancing said aggregate sales data concerning each market basket grouping by embedding in said aggregate sales data an "imaginary item" for each characteristic(s) displayed by each market basket grouping. However, Jacobi et al. discloses using a persons' shopping cart items to suggest or recommend another item to them (Col. 4, lines 1-16, and Col. 6, lines 7-30, and 52-60). Jacobi et al. determines what items to recommend by using past consumer records and tables that show market basket groupings (Col. 9, lines 59-67, through to Col. 10, lines 1-10). Jacobi et al.'s internal system is using the aggregate sales data with an "imaginary item" and determining if this item will correlate with the other items in the shopping cart. If the "imaginary item" does highly correlate with the other items in the basket, then it is recommended or suggested to the shopper. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to create an "imaginary item" with each set of aggregate data in the market basket as it would allow Chen et al. to perform more data analysis and further fit individual shopper's needs. One would be motivated to have Chen et al. contain an "imaginary item" as it allows one to further determine correlating data and place the various users in accurate groupings to increase sales.

(11) Response to Argument

Appellants argue that Jacobi et al. does not teach or suggest the feature of introducing the concept of "imaginary items" to provide an analyst or analysis program with the ability to

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enhance the analysis of market basket groupings by using aggregate basket properties along with actual items and their properties in the market basket analysis.

Appellants define an “imaginary item” in the specification on page 15 and 16 and reiterate the definition on pages 6-7 of the appeal brief. Once again, an “imaginary item” is a **designation indicating the existence of a particular property**, which is added to the basket to identify this property as a characteristic of the basket.

Jacobi et al. teach that the current content of the user’s shopping cart is used as an input to the recommendation service (Col. 6, lines 52-60). The method comprises generating a data structure that maps individual products to sets of related products (Col. 4, lines 1-16). A “commonality index value” is stored with each item in the similar item index list that indicates the relatedness of that item to a popular item based on the sales of the respective items (Col. 9, line 59 through to Col. 10, line 10). Similar items list for each popular item in the shopping cart is retrieved from the similar items table. The similar items lists (i.e. for all the items in the shopping cart) are merged while summing the “commonality index values” of like items where the resulting list is sorted from highest-to-lowest score. The top items are returned as the recommendation (Col. 16, lines 42-60). The “commonality index value” is a characteristic of an item that indicates the relationship that item has to another item. The “commonality index value” measures the similarity between two items and is used to generate a customized unique recommendation to the user based on the items in the basket. As indicated above, Jacobi et al.'s internal system is using the aggregate sales data with an "imaginary item" and determining if this item will correlate with the other items in the shopping cart. The “commonality index value” meets the definition of the “imaginary item” in that it is a designation indicating the existence of

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a particular property of that item, which is added to the basket via the data structure mapping to identify this property as a characteristic of the basket.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

mch


February 18, 2004

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